30 JAN 1907
MADRAS.

THE

Student's Own Magazine

For India, Burma and Ceylon.

A MONTHLY JOURNAL OF EDUCATION.

VOL. 1. No. 12. New Series.	DECEMBER, 1906.	Re. 1 per annum. Single copy, 2 Annas.

DECEMBER.

THE last month of the year 1906 has come, and nearly gone: "Chill December" as Spenser calls it, and well might he do so, for the days are dark and cold in other zones, and are well described in "Love's Labour's Lost," in the scene where Dick blows his fingers to warm them and the icicles are hanging down the wall. The name of the month was given to it in the old Roman Calendar when the year was divided into ten months only; but the Saxons called it Winter-month or Winter-monag.

It is a month memorable for many things, both in the past and present, and we shall notice a few of the people whose birth or death occurred in this month, and who have left their mark in the history of the times.

Mozart, one of the greatest musicians the world will ever know, died in the month of December. His last composition was the "Requiem," and a curious story is attached to this. The facts are well known, but it may interest some of our readers to have them related as told in an old *Edinburgh Review*.

"One day, when his spirits were unusually depressed, a stranger, tall and dignified, was introduced to Mozart. He said that he came from some one who did not wish to be known, to ask him to compose some music as a requiem for the soul of a friend who had recently died. Mozart said he would complete the work in a month, upon which the stranger paid him one hundred ducats and went away. The visit was so mysterious that it had a great effect on Mozart, who immediately set to work on the composition. He worked too hard, made himself ill, and was obliged to rest for a time. One day he said, suddenly, to his wife—"I am writing this Requiem for myself. It will do for my own funeral service." At the end of the month, the stranger came back and asked for the music. Mozart was obliged to confess that he had been obliged, through ill-health, to break his word, and that he would require another month to finish it. No objection was made, and, without being asked, the stranger laid down 50 ducats more, as he said, for additional work. Mozart became still more impressed with the idea that the visitor was a messenger from the other world and that he was writing the music to be sung at his own funeral. The stranger returned on the appointed day, but Mozart was dead, having expired just as the work was finished, and it was sung at his funeral service."

Milton was born in December, and on the anniversary of Milton's birth many years later there died John Bramah, one of the greatest of mechanical engineers and inventors. He is probably best known for his "Bramah Locks," which were so secure that it took the famous Mr. Hobbs thirty days to pick one of them. These locks would make a burglar's trade a difficult one.

Brunel, another engineer, adds to the honor of this month. His great enterprise was "The Thames Tunnel," and the road under the river through the great iron tunnel is now used as a railway from one side of the Thames to the other, *i.e.*, from Wapping to Rotherhithe—places made famous in the reign of queen Elizabeth.

As we get near the middle of the month we remember that there are still living, many who recollect the gloom cast over England and her colonies by the death of The Prince Consort, the father of our present King Edward VII. To him England owes much, and the whole world is indebted to him for the idea of great International Exhibitions. He did much also towards establishing schools

of art, and other societies tending to the improvement of the English nation. He died of typhoid fever on the 14th December, and in those beautiful lines of Tennyson we feel how the nation must have mourned for him.—

> " Not swaying to this faction or to that :
> Not making his high place the lawless perch
> Of wing'd ambitions, nor a vantage ground
> For pleasure : but through all this tract of years
> Wearing the white flower of a blameless life. "

December 21st is the shortest day of the year, the winter-solstice as it is called, and the seven days before and after it were in ancient times known as the Halcyon Days We now use the term to express any time of great peace or tranquility, deriving the phrase from the fable that during these days of December, the halcyon bird, or king-fisher was breeding, and that then the sea was always calm, and perfectly safe for the sailor. Dryden says :—

> " Amidst our arms as quiet you shall be,
> As halcyons brooding on a winter's sea."

Sir Isaac Newton was born on December 25th, 1642. We may safely call him one of the world's greatest men, for before he died at the great age of eighty-four, his scientific and philosophical researches had greatly enriched his fellow creatures.

Charles Lamb, the poet and essay writer, died at the end of the month of December 1834.

Thomas à Becket was murdered on December 29, and December also was the month in the year 1384 when John Wycliffe died.

As we draw to the close of the year we think of the many customs still prevailing by which the old year is speeded and the new year ushered in. Tennyson's words—" Ring out the old, ring in the new "—commemorate the custom of the slow tolling of the bells as the old year dies, and the merry chime which bursts forth as the new year is ushered in. We have rung the bell for 1906. Our magazine in its old form is a thing of the past. With the first number of 1907, we turn over many new leaves, and hope to have much sympathetic proof from our subscribers, old and new, that we are even more successful in our efforts to please them than we were during the past year.

We wish all our readers Health, Wealth, Prosperity, and all possible Happiness in 1907—

" Ring out a slowly dying cause,
And ancient forms of party strife ;
Ring in the nobler modes of life,
With sweeter manners, purer life. "
" Ring out false pride in place and blood,
The civic slander and the spite ;
Ring in the love of truth and right,
Ring in the common love of good."

Many men of note have passed away this year from the scene of their labours, but, in Southern India, we can hardly find one more regretted and lamented than Dr. Samuel Satthianadhan. That he was a Christian and took a prominent place in Christian work, did not prevent him from being a friend of all, and from working equally hard for all his fellow-countrymen.

He was born November 27th, 1861, at Strivilliputur in Tinnevelly, being the sixth child of a clergyman of the same name. His mother was a daughter of the Rev. John Devasagayam, the first Indian clergyman of the Church of England in South India.

The early part of his life was spent in Madras, as his father was transferred from Tinnevelly to that town when his son was a baby of 18 months old.

As a boy, Samuel Satthianadhan went to the S. P. G. High School in Vepery, which may well be proud to have laid the foundation of the education of such a scholar. He passed the Matriculation examination from there, and was considered a very smart, intelligent boy, most industrious, and thoughtful beyond his years. He had the great advantage of going to England with his parents when 17 years of age, and as he remained there four years he benefited greatly in after life by the influence of his surroundings at this time. He was admitted to Corpus Christi College, Cambridge, as a foundation scholar, and there he obtained double honors in the Mathematical and Moral Science Tripos, and before he left England and returned to India in 1882 he had qualified for the L. L. B. degree. Teaching he chose as his profession, thereby further ennobling what is one of the noblest of professions.

He was first appointed to the Breeks' Memorial School, Ootacamund; then after entering the Madras Educational Department, he was Professor in the first grade Colleges at Kumbakonam and Rajahmundry. A few years after he became Professor of Mental and Moral Philosophy in the Presidency College and, about 1895, was made a Fellow of the Madras University by the Madras Government, which recognised the greatness of his work. He returned to England for a time in 1897, and took his L. L. M. degree at Cambridge, and on him a little while after was conferred the degree of Doctor of Laws on account of his learned work on the Land Revenue System of India.

He acted as Deputy to the Director of Public Instruction for nearly a year, and did much hard work as a member of the Education Commission during his last months in India.

Doctor Satthianadhan visited America in September 1905 in order to give a course of lectures, on the invitation of the Universities and Theological Seminaries. His work was very heavy, and though he was not ill when he started on his voyage home, he was doubtless much exhausted. The sea was very rough, and the intense cold eventually made him very ill, and he suffered from double pneumonia. Great hopes were entertained of his recovery, however, and his death in Japan came as a great blow to all who knew him. He is greatly missed, not only on account of his learning, but for the loss, as well, of a friend and helper, in every sense of the word.

He was a great writer, never idle, and his works live after him, to show young India what can be done by a determined, wide-minded man.

His first wife who was a Miss Krupabai Khisty is known as the first Indian lady to write a novel. She was the authoress of 'Sanguna' and 'Kamala'.

His second wife Miss Kamala Krishnamma, was the first Indian Lady to take the degree of M. A. in the Madras University. She still edits the "Indian Ladies' Magazine," and we are very glad indeed to be able to rank both Mrs. Satthianadhan and her accomplishep sister Miss Krishnamma among next year's contributors to the *Student's Own Magazine.*

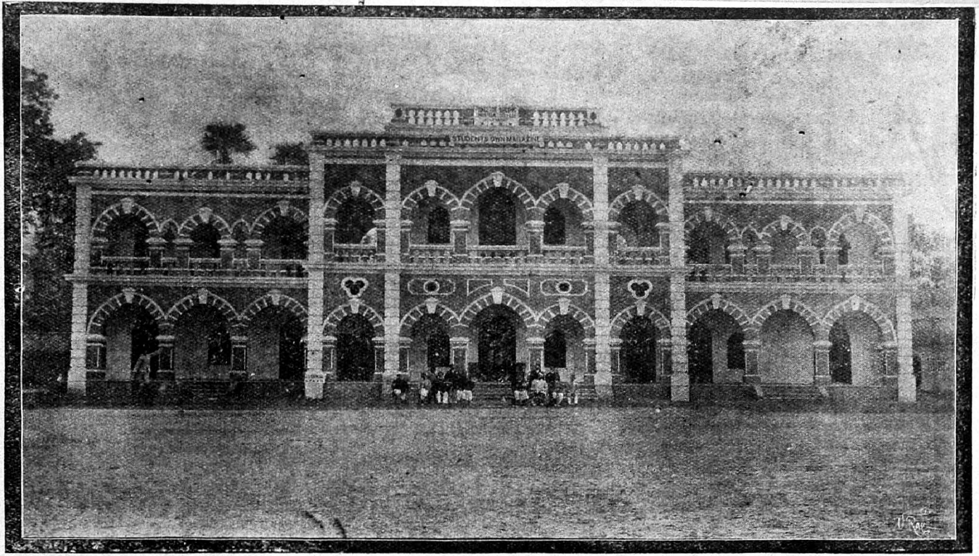
Princeton Building, Christian College, Allahabad.

A MOST interesting account has been sent to us, by our travelling representative, of the Princeton Building, Christian College, at Allahabad. We much regret that we are unable to publish the whole of the matter, but much of it has already appeared in other papers, and our readers may have seen it. The College was opened some four years ago, and among its many attractions are the courses provided for both Art and Science, and for the addition of the Electrical Engineering Course in 1906. The situation of the College is excellent, the fine building standing where it can command a view of the beautiful landscape, as well as the busy life of the city.

The formal opening of the new part of the College took place on November 5th, 1906, a day which will ever be memorable, when we think of the educational institutions of India. His Honor Sir James La Touche, and many others of note were present at the ceremony. We give below some extracts from the excellent speech made by Dr. A. H. Ewing, Principal of the College.

"This building is the incarnation of an idea. The idea is to constitute a centre of student life, where there shall not only be fellowship one with another, but frequent contact with men, whose character shall be an inspiration, and with books whose stimulus ever abides," .... "The power-house provides for two departments of our work here, one of them already in existence, and the other, we trust, soon to begin operations. I refer to the electrical engineering department and the manual training department. We have been working towards these departments for four years. In the former, we offer a three years' course after the B. course (intermediate) has been completed. In the latter we propose to ask the department of education to sanction an alternative school course which shall include shop work, and mechanical drawing . ....Permit me to say that by means of the manual training department, it is our aim to prove to the real advantage of India, that students who give time to the handling of tools are able to do high grade book work in less time than others, who '*grind*' at books the whole day."

The President's speech which followed was very appreciative of the good work being done by the College and its Staff.



Princeton Building, Christian College, Allahabad.

The Chief Justice said: "To the liberality of American gentlemen connected with the ancient University of Princeton, this building owes its existence, the funds, as we have been told, having been collected by the Rev. Mr. Javier, a graduate of that university, who was in Allahabad some five years ago. The building is the embodiment of the interest taken in education in this country, of the good will, and of the liberality of American Citizens. The tablet, which I am about to unveil, will be a lasting memorial of the good fellowship which exists in America towards the people of this land. .... I entirely agree with Dr. Ewing in thinking that students who devote part of their time to the handling of tools will, in the majority of cases, *achieve greater success in book work* than those who indulge in no such avocation or relaxation."

Sir John Stanley, the President, unveiled the tablet on which were the words: "From graduates and friends of Princeton College to the students of North India. Dedicated to the service of God."

Sir James La Touche then made a long and exhaustive speech, and some of his words may well be repeated here, and borne in mind by all our readers. He says: "In every part of the province there is a desire among parents for the arrangement of well managed boarding houses, and energetic efforts have been, and are being made to improve and extend residential accommodation for students in our colleges..... But I need not remind you that a Hostel means something higher and better than a building of brick and mortar. We trust that in the class rooms our students will acquire the positive knowledge and intellectual training which are necessary for success in life, whether the aim be a profession, or the service of the state, or commercial enterprise, or the development of the industrial resources of the country. We hope that residence in the hostels will contribute *to the formation of characters* strong and modest, manly, and courageous to do what is right, that the students will acquire habits of self respect, and self control, of respect towards their teachers, and of kindness towards their fellow creatures. Nowhere is greater stress laid on the formation of character, than in the sacred books of the Hindus."

The ceremonies closed directly after this memorable speech, when Sir James La Touche turned the key of the silver lock, and declared the Hostel open.

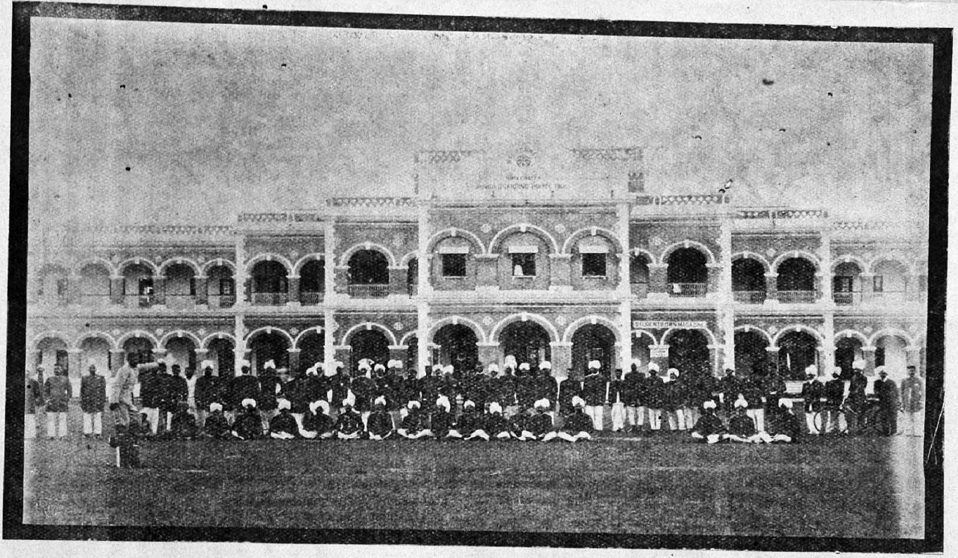
Hostels are rising up in every Presidency, and we urge all students to take advantage of them, whenever possible. Parents would do well to send their boys where their lives can be supervised as well as their school work. Good influence in recreation hours is of quite as much importance as good teaching in school, and we cannot emphasize too strongly the advantage to be gained by a systematic course of what is called "preparation" for the work in the school classes. We are convinced that many of the disastrous failures in the university examinations would be thus avoided. In this connection we would draw attention to our article, "*Why Candidates fail in their Examinations,*" which will appear in our issue for January 1907, and we hope, be of great use to candidates in their further examinations. We have much pleasure in presenting our friends with views of the Christian College and the fine Boarding House or Hostel at Allahabad.

No. XV.
SEBASTIAN CABOT.

"Lives of great men all remind us,
We can make our lives sublime,
And, departing, leave behind us
Footprints on the sands of time."

WE have travelled back to the middle ages for the great man of whom we write this month, and we shall have a practical illustration of those lines of Longfellow with which we head our short biographies each month. The great explorer was born in 1474: thus for more than 500 years have his foot-prints remained in the "sands of time," and many, many indeed have been those great voyagers, who have trod in his steps, and who have "taken heart" again, and gone on with their researches, when they have read of the difficulties encountered and overcome by men like Sebastian Cabot.

The name Cabot, is Venetian, but Captain Cabot as he was called, was, though probably born in Venice, an Englishman, as his father John Cabot had, many years before the boy's birth, settled in England, and traded under the protection of Henry VII.



Macdonnell University, (Hindu) Boarding House, Allahabad.

Sebastian made many voyages with his father while quite young, and on one voyage, when only 20 years of age, they sailed along the west coast of North America, and were the discoverers of Cape Breton and other islands in the great Gulf of St. Lawrence. They were the first Europeans who saw the mainland of America (Labrador). About two years after this, Sebastian made another voyage to this same place, hoping to find the open way to India, but just as Columbus had been baffled, so now was he, and he was obliged to return to England without accomplishing his object. Great and many were the difficulties encountered by great explorers, and it is noticeable how often we may attribute their failures to fright and cowardice on the part of the sailors and men who sailed with them. In this case, as with Columbus, the failure to reach the open channel, so much desired, was due to the fright of the men at the strange things they saw, and which they looked upon as supernatural.

Sebastian Cabot gave his whole life to the study of the Ocean, and to him we owe the first notice of the variaation of the magnetic needle. This discovery has led to other discoveries and improvements in navigation, and the mariner's needle will now guide him all over the world.

We know very little of Sebastian's life, apart from his voyages, and even of some of those we can find but very imperfect details.

He served under Ferdinand of Spain for some time, but again, in 1517, accepted a commission from Henry VIII to go on another voyage of discovery. This was a failure, and he returned to Spain, being appointed there to the post of Pilot Major. It was in 1518 that he made his famous

voyage to Brazil and La Plata, which places he tried to colonise. The account of this voyage is most exciting, and dear to all lovers of adventure. By this time Sebastian fully understood the dangers he must encounter from the superstitious fears and the jealousies of those who sailed with him, so that when he reached Brazil and found mutiny and disobedience among his sailors, he searched for the ring-leaders and arrested his *three chief officers.* He was very severe with them, for he had them rowed to a Portuguese settlement and there left to their fate. This action of his had the desired effect, for the crew settled down, and there was little or no discontent and grumbling heard afterwards. They continued the voyage, and sailed into the river De La Plata, where De Solis, a Spaniard, and his men had met with such a sad end a few years before. There are two large rivers which flow into the Plata—the Uruguay and the Parana. Near these Cabot built forts to protect themselves against attacks from the natives.

The name La Plata, or Silver River, gives the clue to the great attraction this place had for the explorers, and why the kings of all nations were always ready to assist in fitting out ships for these expeditions. The natives of this region wore much jewelry, of curious shapes and designs, all made of silver, and this metal, they told the sailors, came from Peru which was a country far up the river. Cabot and all his men were keen to reach this place, and off they sailed, leaving a few men to defend the forts they had built. Can we picture the voyage? We know more of the land now, for it has been widely explored since those days, but what must our ancestors of the 15th century have thought of the scenes which met their gaze? The mountains of Uruguay and Brazil on

one side, and on the other the broad Pampas stretching as far and farther than the eye could reach! We know how the paddy and other grain waves when swept by the wind: can we imagine the beauty of miles and miles of the long waving feathery Pampas grass? There is also something so utterly lonely in the Pampas of South America, and the sound of the wind as it blows through the grass is like the sad moaning of the sea.

The ships went up the Paraguay, but sad to say, after passing through so many perils, they never reached their El Dorado,* being attacked and defeated by some of the native tribes.

Cabot was obliged to turn back, and, as he neared the forts he had manned, found that a certain Portuguese commander, named Captain Garcia, was waiting to attack him. He claimed that the Portuguese had taken possession of the land before the Spaniards knew anything about it, and this may have been true, for the Portuguese had been always great explorers. Nevertheless, Cabot and his men held their position, but only for a time. In the end Cabot was ruined, and his ruin and failure to reach Peru were due to Garcia.

It was hoped that Charles V of Spain would send men to help in the struggle, but none came, and while Cabot and his men were waiting, a savage attack was made on them by some of the natives, and a horrible massacre took place. Cabot, and some of his men who escaped, went back to Spain, and never tried again to get to Peru, although they explored many other places. Sebastian served under the English king again after his failure to reach Peru, and

El. Dorado = "The Golden City." Manhoa in Guiana was so called by the Spaniards. Figuratively, as here used, it means any land of *wealth* or *riches*.

successfully opened up trade with Russia. Edward VI made him "Grand Pilot" of the nation, which was a post of great honour, and it was after this that he suggested a voyage to discover the north-east passage to China. No success attended his efforts, but he was the Pioneer, and Cabot contributed much to the success of those who afterwards explored these regions.

Very little, we see, is known of the domestic life of Cabot, and no details of his death are forthcoming. He was living in 1557, and would then be nearly eighty years of age, but after that date we do not hear of him, so he is supposed to have died in that year. He was one of the greatest of explorers, and all who lived at the same time tell of his great courage and perseverance in great dangers and under almost impossible circumstances. These are the qualities which make a great explorer, and which helped to make Sebastian Cabot the great man he was and the pioneer of succeeding generations of explorers. He added to the wealth of nations by the trade he opened up, and by the land he discovered, which yielded riches in the shape of minerals and plants. History shows that all countries depend on each other, and that all home produce and manufacture can be improved by intercourse with other nations. We kope to say much in future issues of this magazine on the past greatness of India, and we hope also to be able to point out many things which will add to the greatness of the country in the future. India's sons must become explorers, not necessarily in other lands, but into the riches of their own land and people.

M. K. B.

BUTTONS.

HAS it ever struck our readers that a fortune can be made out of buttons? Yet so it is, for they form in nearly all countries a most necessary addition to one's toilet, and the manufacture of buttons has been for many years a most lucrative trade.

We may safely say that buttons and pins have done much to alter the style of dress in all countries. They are small things to have had such an effect on nations, but without them we must have continued to wear loose flowing folds of cloth merely wrapped round us. And it must be remembered that many of the occupations and much of the work of this century could not possibly be done in these loose, flowing dresses. It has been argued that a great deal that is artistic and picturesque in dress has disappeared with the flowing garments, and that may be, but the gain has exceeded the loss by the greater usefulness of the close fitting dresses now worn.

It was in the reign of Queen Elizabeth that the manufacture of buttons in England became one of the staple industries, but at an earlier date buttons were used as ornaments and were made of gold or ivory. In the 18th century several large factories were established, and a great trade in buttons was introduced between England, America and the Continent.

But in those days "button making" was not the easy work it has become since the use of so much machinery, and naturally buttons were formerly very expensive. Take, for example, the ornamental work on the face of a button which was done by an engraver: now we have the press and stamp worked by an engine. The price of buttons too

has been further reduced by the introduction of cheaper materials in their manufacture.

It must not be thought that England stands alone in this manufactory. There are great branches of this industry on the continent of Europe, and in many towns in Bohemia and France the pretty glass buttons are made. America possesses large factories, and some of our readers may be interested to know how linen buttons came into use in the United States. A man named Williston lost his sight when studying for his profession, and was reduced to the keeping of a small store in order to support himself and his wife. One day, the idea came to his wife that by covering the wooden buttons, then used, with different coloured cloth, she might earn money and so help her husband. She did it by hand for some time, and then she and her husband together contrived machinery for covering buttons, and this was the first machinery used in America for that purpose. Williston became very wealthy, and helped to make others rich, besides giving work to many who might otherwise have starved.

Buttons are now made of many things—bone, wood, ivory, vegetable ivory, glass, porcelain, horn, and even India rubber, which is made hard by mixing it with sulphur and then heating it. Vegetable ivory has taken the place of real ivory to a great extent. It is obtained from the nut of a palm-tree found in South America. The milk inside the nut gradually becomes quite hard, and can be dyed any colour, and cut into any size or shape. It is said that twenty tons of this ivory are used in one week in the Birmingham factories.

Great quantities of metal are also used, and thousands of yards of linen or cloth, which are required to cover these buttons. If we examine one we find first a ring of metal with a deep groove all round it. Then on the best buttons three thicknesses of linen, that on the top or outside being finer than the others. These round pieces of linen are called blanks, and are now cut out quickly by a machine. And the machine fixes the blanks into the grooves of the metal ring, which are then pressed very tightly down, and the linen firmly fixed. The next process is sewing the buttons on to the cards, and this is the work, in England, of women, and even small children.

There are many facilities in this country for the pursuit of this manufacture, even without machinery. The materials are ready to hand, the necessary skill in shaping, moulding, and carving, is natural to the Indians, and button making might become a great industry, if some encouragement were given to it. But, of course, money would be made mainly by export, as the ladies' dresses of India do not create such a demand for buttons as do the garments worn in other countries.

OXFORD.

WE hear of Oxford and Cambridge; we talk of their colleges, and of the lives of the students in them. Some few Indians have had the privilege of going home and spending some time in these universities, but to most they are merely a name.

Oxford has been a seat of learning, dear to scholars for many hundreds of years, since the 11th century. But the city is older than that, and famous schools existed there at a much earlier date. The name in the 10th century was Oxenaford; a hundred years later we find it changed to Oxenford, and it was thought that the word was derived from a "ford for oxen," across the shallows of the river. But others say it

is far more probable that the name means the "ford of the waters." The earliest authentic mention of the city of Oxford is to be found in the English Chronicle of 912, in the reign of the Saxon king Edward the Elder, when we learn that he made London and Oxford part of his kingdom of Wessex. Then, until the conquest of England by the Normans, we find constant mention of Oxford especially as a place for meetings of the Gemots or Parliaments. There was a superstition that it was unlucky for the kings of England to live in the city of Oxford, and this superstition arose after the murders of kings Edmund and Harold, at an early date in English history.

Beaumont Palace, which was built by Henry I outside the city of Oxford, was a favourite royal residence, and here both Richard I and John were born. A charter raising the town to the same privileges as London was granted by Henry I. During the civil wars in the reign of King Stephen, Oxford played a prominent part, and it was from Oxford that Matilda fled to Abingdon, over the ice-bound river. In 1133 we first find the traces of that organised teaching which has raised Oxford so far above other cities, and made it the seat of learning; but it was many years before the city became second in importance to the University. Parliaments were still often held in the town, among the most important being the "Mad Parliament," which led to the enactment of the "Provisions of Oxford (1258)*. Religious orders of all kinds settled in Oxford, and the names of streets and bridges testify, at the present day, to the sites on which their buildings stood. The number of students in the reign of Henry III is said to have been thirty thousand, but this is disputed, and must have been a mistake.

Oxford increased greatly in importance in the reign of Elizabeth, and during the Civil War it was the head quarters of the Royalist party. It had been the scene of the burning of Latimer, Ridley and Cranmer in Mary's reign, and, at almost every crisis in history or politics, it has played an important part.

During the reign of George I, there were serious Jacobite riots, and from that date the city became Hanoverian as opposed to the University which was faithful to the Stuarts. There is perhaps no city in Europe which interests one as does Oxford. It has been called the

* Of these provisions one of the most notable was that demanded by Hubert de Burgh, "that all the royal castles should be surrendered into native hands." The English nobles were determined to have the power in their own hands, and claim the rights of the Great Charter.

"City of Palaces," and the architectural effects are wonderful. Wordsworth truly says:—

"Much have ye suffered from Time's gnawing tooth:
Yet oh, ye spires of Oxford! domes and towers!
Gardens and groves! *your presence overpowers*
The soberness of reason: till in sooth,
Transformed, and rushing on a bold exchange.
I slight my own beloved Cam to range
Where silver Isis leads my stripling feet."

Apart from the beauty of the place, there are always the hallowed recollections of the past, on which the mind can dwell. The lovely gateway of St. Mary's Church impresses as with its beauty, and just inside the west doorway is the grave of Amy Robsart. Most of our readers know her story as told in Sir Walter Scott's *Kenilworth*. Close to the church is the world-famed Radcliffe Libary. Dr. Radcliffe, who was its founder, is said to have fore-told the date of his own death, and of his three great patients, King William and Queens Mary and Anne. The Bodleian Library, also of world wide fame, was founded by one Sir Thomas Bodley of Devonshire. He was knighted by King James. In the upper room or library can be seen, among other curiosities, the copy books which were used by Edward VI. and Elizabeth when they were children. In the gallery, we find the actual lantern used by Guy Fawkes, when he was taken prisoner in the cellar under the Houses of Parliament in London. Here also we find the chair which was made out of Sir Francis Drake's famous ship "The Golden Hind."

We must pass on to the colleges of Oxford, of which there are twenty one, and out of whose doors have issued forth the greatest men of all nations who have studied and gained their laurels at Oxford. Christ Church has given some of the greatest statesmen to the country, and added to these men, we think of John Locke, Ben Johnson, Sydney, and others who were men of this college. Our own King Edward VII was also a student there, and its founder, Cardinal Wolsey, may well be proud of the men who have made famous his college. Christ Church recalls to us the martyrdom of Archbishop Cranmer, for it was in the cathedral of the college that Cranmer was finally

degraded, before he was carried off to prison and death. We have a full account of all that took place in "Book of Martyrs" by Fox.

The Martyr's Memorial was erected in memory of Cranmer, Ridley and Latimer, but the exact spot on which they were burned is not known. It was built by Sir Gilbert Scott, and is a copy of the beautiful cross at Waltham which was erected in memory of Eleanor, the wife of Edward I.

Magdalen (pronounced Maudlin) College was founded by William Waynflete, in Henry VI's reign. It has a beautiful tower, and a curious custom is still practised. On May 1 (May day) every year, a Latin Hymn is sung at dawn from its top by choristers.

All the colleges have on their walls the names of men who have made them famous. We can only draw attention to a few.

The spirit of Wycliffe the great reformer hovers over Queen's College, and is reckoned a great honour by its students. New College was founded by William of Wykeham, and must therefore be over 500 years old. The Gardens are very beautiful, probably the finest in Oxford. They are surrounded by the old city wall, on the top of which is what is called an "alure." This is a walk, with parapets, bastions, and small loop holes through which arrows were shot. It is interesting to antiquarians as a perfect sample of an ancient English fortification.

(To be continued).

The Dynamite Ships of the Thames.

Few people know that there are always present in the Thames ships laden with dynamite, to collide with which would mean instant destruction. They lurk in the shadow of Canvey Island. It is there we store our dynamite packed into stout little wooden cases, each containing a sufficient quantity to shatter the larger part of London. Two men keep watch and ward, and, unless you would be shot or deported, do not presume to approach their keep. In slippered feet or stockinged they tiptoe about the decks; to walk with booted soles would be to court disaster.

It once happened that a cargo-boat took fire near Canvey Island. The crew could not extinguish the flames, the vessel had to be abandoned, and the tide carried her straight for the dynamite ships.

By a miracle the blazing hulk steered safely between them. But the tide turned, and with it back again she came.

Another miracle! and the floating inferno missed them all a second time. A spark from her blazing timbers, the least shock from a collision, and she had exploded such a mine as would have blown the half of Essex into Ireland.

How Seabirds Quench Their thirst.

The means by which seabirds quench their thirst when far out at sea is described by an old skipper, who tells how he has seen birds at sea, far from any land that could furnish them water, hovering around and under a storm-cloud, chattering like ducks on a hot day at a pond, and drinking in the drops of rain as they fell. They will smell a rain squall a hundred miles distant, or even farther off, and scud for it with almost inconceivable swiftness.

Endurance of Migrating Birds.

The vigour and endurance that birds display upon the wing is astonishing. Nearly all the migratory species of Europe must cross the Mediterranean without resting.

Our little bluebird pays an annual visit to the Bermudas, six hundred miles from the continent, and a well-known professor estimated its very moderate flight at more than a mile a minute.

Remarkable stories are told of the long flights of tame falcons—one going 1,300 miles in a single day. An authority on the subject mentions carrier pigeons that flew from Rouen to Ghent, 150 miles, in an hour and a half; and a certain warbler must wing its way from Egypt to the Baltic, 1,200 miles, in one night.

English as a Court Language.

The use of English at various Courts is quite common now-a-days, especially at the Russian Court, where, since it became known that the Tsar and Tsarina always used it between themselves, many members of the Royal household make a practice of speaking and writing it. This

is curious, because at one time all our own Royalties spoke German, and at Tel-el-Kebir it was noticed that whenever the Duke of Connaught grew excited he gave his orders in that language.

Tugs to the Rescue.

It was New Year's night and regular Liverpool winter weather—a biting wind with cuttingly driving sleet and snow, a leaden sea and a leaden sky.

From out the warmth and cheeriness of a New Year's party a tall, commanding-looking man was hurried to the landing stage by a sailor wrapped in reefer jacket, oilskins and Sou'-wester. The tall man, one of Liverpool's most prominent salvage captains, dragged his Inverness cape over the white expanse of his dress shirt.

"There's some weather working up from the Sou'-west," he said to his companion. "What's the trouble?"

Swift on his query there came a torrent of technical explanations from the sailor, embodying the information that a liner was in collision off the "Bar", and help had been telegraphed for.

At the landing stage they found the famous tug *Pathfinder* awaiting them.

"Where's the skipper?" asked the salvage captain.

"Can't find him, Sir," was the answer.

"Very well, then; cast off!" Our tall friend stepped on to the bridge, his hand closed over the engine-room "telegraph," his eyes strained into the musk towards the river mouth; the engine room bell rang, and the *Pathfinder* tore off down the river.

At the "Bar" they found a sad mess. A liner, anxious to get home, had ploughed into Mersey River too tempestucusly, and had run smack into an outgoing "tramp" steamer. The "tramp" was oddly enough, not much injured, but the bows of the liner where stove in and twisted as though she had hit an iceberg. Her collison bulk heads held, and she floated, but her Captain feared that if they attempted to put any way on the vessel they would go, and his charge, with all the souls on board her, would be lost.

The salvage captain took command at once. He decreed shores for strengthening the strained bulkheads, and worked steadily with his

men for six exciting hours. Then he was not satisfied with the job, and declared that the giant liner must be towed into dock *stern foremost*. This difficult job he accomplished, and when he stepped off the bridge at length he discovered he had been out in that awful weather for the twelve hours, clad only in his evening things and a light great coat !

Habits that Make us Slaves.

By following the lead of others, by leaving things to chance, or by waiting till there is nothing to be done but one thing, we try to shirk making up our minds for ourselves.

"Drift! It is the common method of the life of millions," declared Emerson. "They decide nothing—they wait till Fate pushes them on or up, or down. They complain sometimes when Fate is unkind that they have never been their own masters. To be one's own master, a man or woman must cultivate the faculty of will, which alone can make them so—must cultivate as a habit the power of deciding and saying 'I will.'

The general result of the habit of shirking making up one's mind for oneself in small things is that when a real problem presents itself people promptly run away from it. They try every shift they can think of to avoid arriving at a decision.

It is said that Mr. Chamberlain once christened a certain politician "Mr. Let's-wait-and-see,' and declared that he believed if the gentleman had not been bold he would have waited every morning to see what would turn up to decide him as regarded on what side he should part his hair.

"Cultivate decision, having what is called a 'mind of your own,'" said Lord Coleridge, addressing some legal students. "Use your intelligence and act according to its light. You will make mistakes, no doubt, but what else shall you go by with fewer disasters ? Think for yourselves, and do not shirk the trouble of using your own brains. Don't be always asking 'what would so-and-so do, ?" but ask ,What should I do ?" When you have found the answer, act."

Worked out Beforehand.

Each Man-of-War is built upon paper before a single plate of steel is forged. Not only are the length and breadth of a ship decided upon, but the Naval Constructor can tell, to an ounce, how much water she will displace when her armour and guns are mounted upon her, how many times her propellers will revolve in a minute with a given pressure of steam, and how many tons of coal an hour must be consumed to attain a certain rate of speed.

How to Approach Work.

Do it cheerfully, even if it is not congenial.

Prepare for it thoroughly, and work with a purpose.

Make it a stepping-stone to something higher.

Endeavour to do it better than it has ever been done before.

Believe in its worth and dignity, however humble it may be.

See how much you can put into it, instead of how much you can take out of it.

Remember that work well done is the highest testimonial of character you can receive.

Detectives' Spies.

If the full tale of Scotland Yard were told, we should probably hear less of the expression, "There is honour among thieves." For, despite the oft-repeated assurance that the average criminal is true to his colleague, one can find nothing to prove it.

Every year hundreds of arrests take place through the medium of the "nose." The "nose" is a scout for detectives. In ninety-nine cases in a hundred he has himself done penal servitude, and, being a criminal, he knows the criminal's ways, his haunts, and, what is more important, he hears of all the plans for "big jobs" of the future. He listens, then tells the police. And one night a band of burglars are surprised while at work.

Very often the "nose" will go so far as to participate in the burglary, in order to assist in the capture of a man who is particularly "wanted." There was an instance, not long ago, when thieves entered the premises of a well-known merchant in Hatton Garden under cover

of darkness. The papers told a thrilling story of how every member of the gang—a gang of four—was overpowered after a desperate struggle. But the papers did not tell all; they only knew a part.

There were five burglars, not four; and the fifth—well, he escaped. The police knew where to find him at any time.

Our "Failures" in Westminster Abbey.

"We are apt to get wrong," remarked Mr. Choate, the United States Ambassador once, "when we measure success by pounds, shillings and pence, but it is a common trick of the age. We have evidence every day before us if we would open our eyes to it, that riches do not necessarily ensure happiness, which is real success. I have known poor folk whose happiness has been great, and rich people whose misery has been intense, but the world reckoning up these people will insist that the former are failures, and the latter successes. Success in life and success in money-making are two different things."

Absolutely; but we will not believe it. It seems horribly difficult to imagine any one a success without "a pile."

The Earth's Crust.

Sir William Thompson, a leading English geologist, has stated that under the strain of the tide-producing force of the sun and moon, the earth could not keep its shape as it does unless its crust were at least two thousand or two thousand five hundred miles thick. It must be largely by such speculations as this that we reach any idea of the thickness of the crust, as there is no direct way of measuring it, and it is doubtful whether it will ever be determined exactly.

Essay Competition.

We must apologise to our competitors for the delay in giving the answer to the Arithmetical Puzzles. The sheet containing the answers and the subject for this month's Essay was apparently lost. The answers will be in the January number, which our readers may expect to receive about the 15th proximo. The subject for the next Essay is—The trees of India and their uses. *Competitors are earnestly requested to write on foolscap paper, and on one side only.*

161755
600 008
Tm 211, N06

MERIT WILL WIN.

Awarded Silver Medals and 1st Class Certificates at Exhibitions.

IMPERIAL BLUE BLACK INK POWDER.

Used by Vakils, Pleaders, Zemindars, Teachers, Students and numerous Merchants throughout India, Burma and Ceylon.

COMMANDS THE LARGEST SALE.

It Dissolves in Cold or Hot-Water

It writes a pure Blue Colour and turns intense Black.

DOES NOT CORRODE STEEL PENS.

Never Thickens or Deposits, Flows Easily from the pen, Dries Rapidly, and is Cleanly to use.

Best Black Ink Powder Known!

BLUE-BLACK, RED, GREEN, OR VIOLET INK POWDER. 3 Pies a Packet.

100 Packets in a neat Card-board Box Price Rs. 1-4-0. Postage extra.

SPECIAL PRICE FOR THE TRADE.

SOLE MANUFACTURERS,

T. S. SUBRAMANIA & Co.

32, *Armenian Street, Madras.*